

**AMENDMENTS TO THE SPECIFICATION**

Please substitute the paragraph on page 10, lines 13-20 with the amended paragraph below:

d -----The process according to the invention for encapsulating liquid, hydrophobic active ingredients in a moderately to strongly hydrophilic matrix has significant advantages over conventional processes. First, the size of the inclusions containing the active ingredients, may be precisely controlled, largely independently of the processing conditions in the extruder. Whereas in conventional extrusion encapsulation, inclusion sizes below 5 ~~mm~~  $\mu\text{m}$  to 10 ~~mm~~  $\mu\text{m}$  are very difficult to realize, using the process according to the present invention, inclusion sizes below 2 ~~mm~~  $\mu\text{m}$ , preferably below 1 ~~mm~~  $\mu\text{m}$  are obtained. -----

Please substitute the paragraph on page 10, line 21 through page 11, line 22 with the amended paragraph below:

e -----Inclusions smaller than about 0.01 ~~mm~~  $\mu\text{m}$  to 0.05 ~~mm~~  $\mu\text{m}$  do not significantly contribute to the total amount of encapsulated oil. This is very difficult to achieve using conventional extrusion encapsulation techniques. Accurate knowledge about the inclusion size in the extrudate may be obtained by measuring the droplet size distribution of the emulsion, for instance by using scattering methods. Second, the evaporation of the active ingredients during the encapsulation process is strongly reduced because the active ingredients are protected by an emulsifier film when they are introduced into the matrix. Introduction of the emulsion via a feed port mounted on the extruder barrel gives a high flexibility with respect to the processing of the matrix composition, while at the same time limiting the evaporation and degradation of active ingredients. Third, the stability of the active ingredients in the extruded product is very high because the small size of the inclusions and because the inclusions are fully covered by an emulsifier film. The emulsifier is used more efficiently when it is added to the matrix premix. Fourth, gentle mixing conditions in the extruder barrel will suffice to uniformly disperse the emulsion droplets through the matrix, in strong contrast with conventional extrusion encapsulation techniques, where high shearing forces are necessary, even to achieve a rather coarse dispersion quality. Moreover, high shearing forces may unnecessarily degrade polymeric matrix constituents. Fifth, the range of matrix materials which may be used is increased because viscosity disparities between high-viscous matrix and the low-viscous liquid active ingredients are minimized and the affinity of the hydrophobic active ingredient for the hydrophilic matrix is increased through the use of an extrusion film. Sixth, the amount of surface oil upon fracture of the extrudate is low because of the very small inclusion size (compare the inclusion sizes shown in Figures 2 and 3). The electron micrograph of Figure 2 shows inclusion with a diameter of up to

C2  
5 micron, which is representative for extrudate according to the state of the art. Further, a broad size distribution is shown as well. In Figure 3, the extrudate according to the invention are significantly smaller than 1 micron. Further an almost monodisperse size distribution is shown.

Please substitute the paragraph on page 18, lines 2-8 with the amended paragraph below:

C3  
----Hot beverages were prepared by adding 200 ml of boiling water to standardized amounts of flavor and flavor encapsulates: sample A containing 0.05 g liquid flavor BC 2420 (Givaudan Roure, the Netherlands), sample B containing 0.2 g Flav-O-Lok CB 2774 (Givaudan Roure, the Netherlands) and sample C containing 0.6 g starch extrudate of example 1, with particle sizes between 500 and 600  $\mu\text{m}$ . The intensity and quality of smell and taste were observed over time.---

Please substitute the paragraph on page 21, lines 4-15 with amended paragraph below:

C4  
----Small quantities of the ground extrudates (emulsion injection and liquid flavor injection) were fractionated according to particle sizes with a set of analytical sieves (10 cm diameter; particle sizes 200-500  $\mu\text{m}$ ). After extraction, several of the fractions of both extrudates were analyzed for surface oil by a pentane extraction. For this, 5 g ground and fractionated extrudate was mixed with 40 ml pentane (analytical grade) and filtered over a standard glass filter. The extract was collected in a bottle. The residue on the glass filter was rinsed twice with 20 ml pentane, which was also collected in the bottle. Afterwards, the extract was analyzed according to standard GC procedures for flavor content. The found levels of surface oil were normalized for the flavor load of the extrudate and expressed in g per 100 g of total extrudate at a flavor load of 10% of the dry matrix material.---

Please substitute the paragraph (table) on page 21, line 16 with amended paragraph below:

C5

Surface oil (g/100 g extrudate (10% load))	Particle size 200 - 250 $\mu\text{m}$	Particle size 400 - 450 $\mu\text{m}$
Extrudate (emulsion injected)	0.17	0.13
Extrudate (liquid injected)	0.7	0.4